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ON THE USE OF LARGE DOSES OF QUININE.

Report of a Committee of the Medical Department of the National Institute, on Dr. Buck's Paper "On the Use and Abuse of Medicine."

[Communicated for the Boston Medical and Surgical Journal.—See pp. 229 and 249.]

YOUR Committee, to whom was referred the paper of Marcus C. Buck, M.D., beg leave to present the following as their views on the subject of his communication.

The title of the paper is "On the Use and Abuse of Medicine." In treating of this subject, the writer has taken some very sensible and proper views. In the commencement of the paper, the author avows the object he had in view in writing and reading it before the National Institute. The object is a most laudable one, and with the views entertained by the author, he could not conscientiously refrain from this course. Humanity, as well as the interests of society, required it of him. We are also pleased to observe the spirit of tolerance and the courteous and complimentary style of the paper. Although he attacks the doctrine and practice of a very large portion of the surgeons of the Army, he extends to them, individually, and to the head of the corps particularly, well-deserved compliments.

The object of Dr. Buck's paper is to oppose his observations and experience, to the practice resorted to within the last few years, of giving large doses of quinine, and to disapprove of its use. Many very cogent and substantial arguments are introduced by him, to sustain his motto, "*In medio, tutissimus ibis.*"

In order that the committee may be fully understood in the views and opinions they have expressed, it will be proper to pass in review, cursorily, the subject and object of the paper to which Dr. Buck's is intended as an offset or corrective.

This paper was read before the convention of the National Institute by Surgeon Van Buren, U. S. A. This, if we understand the nature of the paper correctly (not having heard it read), was to present, in a concise form, the evidences of the advantages of large single doses of quinine, over small and repeated doses of the medicine, in malarial diseases. And these evidences were drawn directly from recorded materials presented to the Medical Bureau of the U. S. A., by medical men of the highest standing, the most unimpeachable veracity, and after their fre-

quent and repeated trials of the medicine in their practice in the South. If what I have heard of the nature of this paper be true, no opinion was expressed by the compiler, and no theory was deduced from the facts. His paper was a mere statement of facts collected in the manner above stated, and elicited by the Surgeon General, with the view to the more correct understanding of the subject. He did elicit full and important details, which go far to prove that the medicine may be given in large doses with impunity, and with a decided medicinal effect. The facts presented by this paper of Dr. V. B. cannot, or rather should not, be compared to those detailed by Dr. Buck, of the administration of large doses of opium and other poisons with advantage, because we know that 99-100ths of persons would be killed by this indiscriminate opium practice. Whether or not that would be the effect of quinine, is shown by repeated observations made by army and other practitioners. It has been clearly shown, that no case of death, which has occurred after the use of large doses of quinine, has ever been traceable to this medicine; therefore his illustrations of the impropriety of this practice will not hold good.

In presenting his views on the subject, Dr. Buck has lost sight of a very important fact. The number of cases in which single and very large doses of quinine have been given, is so great, that it no longer produces a query, whether this can be done. Upwards of two thousand cases have been treated in Florida in this way, and with far greater success than ever was known to arise from any other method, and, as I have said, without death resulting from it. There has as much as one ounce of sulphate of quinine been given, and no ill effects occur from it.

Dr. Buck takes the ground, that if small doses will have the desired effect, why resort to such large doses? This, of course, is a most sensible view of the matter. *If small doses will have the* desired effect, why resort to so large a dose? What has been the experience of all those who have used this medicine in large and small doses? They all tell you that it required larger doses in Florida to produce a certain effect; that the small doses, repeated, as was wont to be our practice up to this era, proved inefficient. They tell you, moreover, that small doses repeated, do not produce the same decided and permanent impression as the large single dose; that small doses produce more certain and decided cerebral derangement than the single large dose. Now these are not theories, not mere speculation, but the result of actual observation. Thus it is shown by these gentlemen, that in several cases of delicate females and others, when small doses of the medicine were given, severe consequences followed; while the administration of one full dose, of 20 or 30 grains, so far from producing cerebral disturbance, had the contrary effect. This, I say, is not theory, but fact; and many such facts are on record as coming from army surgeons and several private practitioners, both in Florida and other malarial countries. It is true that there are a few rare instances of blindness and deafness being produced by this wholesale practice; but have we not known the same to occur from the continued use of quinine in small doses? Therefore the few cases in which unpleasant effects have arisen from the use of this

medicine, should not weigh, when we have thousands in this country alone of the decided beneficial effects of it. Idiosyncracy may influence the action of this medicine, as in the case of Dr. Buck's opium-eaters and others. But we need not confine our remarks to the experience of surgeons in this country, as to the good effects of large doses of quinine in malarial diseases. We find in Europe that they are resorting to it. Among others, I will merely allude to the opinion of Dr. Austin Flint, of Buffalo, N. Y. (vide page 277, Vol. II. of the American Journal of Medicine). And what has been the experience in this city and the surrounding country? Let me refer you to a paper by Dr. ———, of Maryland. There we find the administration of large doses of quinine advocated. And the same practice is followed, I hear, in the surrounding and adjacent counties of both Virginia and Maryland. In our own city we have the evidence of our friend Dr. Sewall, who has given it in drachm doses. (See London Lancet.)

Now, without going further, this is a weight of authority which Dr. Buck cannot disregard, nor can the medical world. It has been more than five years since Mr. Piorry first made his observations on the subject of giving large doses of quinine in enlarged spleen; and we must regard the accounts we have received of his success. But prior to his observations, and long before the Florida war, eminent men in this part of the country gave large doses of quinine. Dr. Potter gave 8 grains; and advocates of his precepts and practice have been increasing since he wrote and lectured on the subject. Let us, then, sum up the facts on this subject, for from these much may be argued on which to form our judgment.

In the first place, it has been shown by more than 2000 observations in this country, that large doses of from 10 to 60 grains, or an ounce, of quinine, can be given without producing injury.

2. That it has been proved, beyond doubt, that these large doses do exert a curative effect on periodical and malarial diseases, and more certainly than small doses.

3. That the cases of permanent injury resulting from large doses of quinine, are not more, indeed not so numerous, as from repeated small doses.

4. That the temporary inconvenience of disturbance of the nervous system is not so liable to ensue from large as small doses. This is stated, though our experience is to the contrary, in most cases.

5. That so far from smaller doses being more certain, they are not, the paroxysm being far more likely to occur after their use, than after a single large dose.

6. That the impression made on the system is more permanent from large than small doses.

7. That in diseases that run their course rapidly to a fatal termination, as in the southern country, a reliance on small doses was found to prove hazardous to the safety of the patient; therefore, when it is desirable to cut short or prevent the occurrence of a violent chill, the large doses should be resorted to.

8. That visceral diseases are not more liable to follow, if as much so, from large as from small doses of quinine.

Now these various conclusions, if true—and how can we doubt their truth, coming from the sources they do?—should, to say the least, cause us to reflect before we denounce the practice of giving large doses of quinine, and call it rash and empirical.

Our *own* individual experience, though limited, is yet to us worth something. We have been in the habit, from long usage and from impressions imbibed, like Dr. B.'s, from lectures heard in our pupilage, of considering a grain or two repeated quite enough; and we feared to administer a full dose until within the last year, since when we have been in the habit of giving 10 and 15 grain doses, the night prior to the expected paroxysms of fever, and must say have seldom been disappointed with its effects. Convalescence succeeded to its administration, and seldom have we found it necessary to repeat the dose.

In the use of all medicines it is important and proper that we should discover the medicinal dose. More than this is of course superfluous. This is an important point to ascertain in the medicine now under consideration. And it should be the duty and determination of all who regard the interests of the community, and the science of medicine, to aid in the furtherance of this object. All over a certain amount is either inert or injurious. Our observations lead us to consider that about 15 grains in this climate may be considered the *medium* dose, and that as much benefit will result from this dose as from two scruples or a drachm. Less than these doses will scarcely act as an anti-periodic medicine; but this dose, given at a proper period of time from the anticipated attack, will most certainly have the desired effect.

The next question to be ascertained, is, how long before the expected paroxysm should this dose be given. This is a very important fact to have fully ascertained, for it is an object to give it as far distant from the paroxysm as possible, for reasons well known to all who have ever used the medicine. We have found twelve hours answer exceedingly well, and this is the usual period of time allowed. But some recent observations have gone to prove that the anti-periodical effects are more decidedly felt eighteen hours after its administration.

Let us next ascertain in what class of diseases quinine is most suited, and whether we can account for the difference in the size of the dose, which has been given at different periods of time since its discovery.

The first part of this inquiry can readily be answered, if our opinion of the mode of the action of this medicine be true. We look upon it as purely an anti-periodic medicine, and indicated in all this class of diseases particularly, possessing peculiar medicinal virtues in malarial diseases. We hold that there is no purely tonic properties in quinine. We can readily conceive, therefore, that its action may be prejudicial, whether given in large or small doses, in diseases having an origin independent of malaria and not periodical in their type. Hence we find that Britteneau, Recamier, and others quoted by Dr. Buck, found it not only injurious but actually fatal in diseases of this class. But it does not clearly appear, in

the observations of these gentlemen, that death was more the result of the large doses of quinine which they administered than of the disease in which it was given. We should not be precipitate in referring death to the medicine administered in diseases which are so often fatal, particularly under the treatment of the French pathologists. And we should be careful, also, in ascertaining the effects of medicine on dogs and other animals, how far the action on these is applicable to the human economy. For it is a well-known fact, that many articles of the Materia Medica, which exert a baneful influence on the lower orders of animals, are not only innocuous to man, but possess a curative and sanatory effect on him. We have ever regretted that this mode of deducing the effects of medicine on the human economy should have been practised.

The question now arises, whether causes do not exist, *why* this medicine can be exhibited at the present day in larger doses than formerly. We entertain the idea that causes do exist for this. And among the *first*, we shall notice the *deterioration of the article*. This will account, in some degree, for the capability of the system to bear a larger dose than formerly. When this medicine was first discovered and introduced into practice, *one* grain was equivalent to one drachm of the best Peruvian bark. The medicine then sold for from $10 to $15, even $30, per ounce. What the proportionate dose of it is now, we are unable to say. But the price is now reduced to from $2,50 to $4,00 per ounce. Inasmuch as bark continues much the same in price, we would infer that there is nothing to justify the marked reduction of the price, unless it be the adulteration of the article, or the more slovenly mode of preparing it. The greater facility of making it, would of course reduce the price greatly. We then include this among the reasons why the system will bear larger doses, and why larger doses are required to produce the desired effect than formerly, though we do not by any means wish to be understood to assert that the system would not formerly have borne larger doses than were then given.

The *second* reason why larger doses are more admissible than formerly, is the marked modification of the various diseases to which the human family are liable within the last half century. This is truly remarkable, and it is from this circumstance we must account for the numerous fashions which have prevailed in medicine and medical practice, and which are so pointedly alluded to in the paper of Dr. Buck. Within our own recollection many have reigned, and have been superseded. This, though, may be all accounted for very rationally—the necessity of the change in the mode of practice being required by the changes which disease has undergone; the practice being in accordance with the exigences of the cases. We must not be understood as expressing the view that the character and the nature of the *semina morborum* have undergone any modification; that there has been really any change in the cause of disease. It is the same causes acting on the *systems* which have been revolutionized by the habits of man, by his advancement in civilization, by his increase of an indulgence in luxuries. These influence the habits, morals and customs of whole nations, and may ac-

count for the different influences which the *semina morborum* have now from what they had when man was nearer his primitive state. In illustration of this, we may refer to the influence of climate, season of the year, &c., on the character of disease. We may farther illustrate it by exhibiting to you the fat, jolly, beef-eating and beer-drinking alderman of London; the butler of "my lord's" mansion, confined solely to his domains; or the Frenchman confined to the purlieus of Paris, accustomed to breathe only its foul and polluted air, subsisting on soups, sour wines and "lavements." Compare these with the hardy American, living in an open and well-ventilated country, confined to no space, bound by no usage, and subsisting on food compatible with his nature. Now examine what will be the effect of similar causes of disease acting on these two dissimilar classes of individuals. Why, the same cause of disease acting equally on these several individuals would produce dissimilar effects, which would require different methods of treatment.

Here we have illustrated the principle, with which we set out in the above paragraph, that causes modify the action of disease and treatment. Climate, it is well known, produces differences in the character and the type of diseases. It changes the whole nature of the treatment. The subjects of Florida, and of the whole South Western and Southern countries generally, are liable to sudden and violent forms of disease, different in their type from those of the North and East, and generally unknown to those people. This principle, doubtless, accounts for the difference in the quinine practice of the two regions. It accounts for the necessity of giving large doses of the article, in some countries, while smaller doses answer for others. It may account for the fatality attendant on the administration of this medicine in France, and its beneficial effects in this country. This principle, and that already alluded to, viz., the applicability of this medicine only to periodical malarial diseases, may serve to account for the discrepancy of the testimony relative to the advantages of the large doses of quinine. In speaking of the change which disease has undergone, without assigning other causes for this change than those already mentioned, we may assert our belief that disease has undergone a very essential and marked change in its type in this country. And in this opinion we are not singular. In conversation with men of eminence, we find the same opinion entertained. The nervous system seems to be more or less involved in nearly every form of disease which presents itself to us; and this has been particularly the case in this section of country. Thus we have nervous, neuralgic symptoms complicating nearly every case which presents itself to us. If this fact can be sustained by more extended observation, as we believe it can be, it will go far to account for the modification necessary for the treatment of diseases.

The question now properly presents itself—inasmuch as the mass of beneficial effects of large doses of quinine have been made in the Southern and South Western portions of this country, will the practice equally answer in other sections of the United States? Or should we modify the practice according to the climate, seasons of the year, &c.? Do intermittents of every portion of the United States, and of every country, re-

quire to be treated by large doses of quinine? This we consider a question of the first moment. Admitting, as all must do, the propriety of the practice, at least in the South, should it not be imitated elsewhere? What has been the result of the observations of the physicians of the Middle States, and in our own District? Information on this subject, thus far acquired, leads us to the belief, that this class of diseases, arising as it does very much from the same cause, requires little modification in its modes of treatment. In this city, it is not an uncommon practice to administer 10, 20 or 30 grains of quinine daily in one, two or three doses, with decided benefit, not only in intermittent but in neuralgic diseases. This practice, thus pointed out in the paper already alluded to, published in the Baltimore Medical and Surgical Journal, from a highly respectable source in Maryland, is now the common practice of the lower counties of that State. But how shall we meet this question when applied to the Northern sections of the country? Malarial diseases in these are so infrequent, that but few opportunities exist of testing the value of the practice. Judging from the paper of Dr. Buck, we should rather infer, that physicians oppose the practice, either from fear of resorting to it, or ignorant of its advantages. Having succeeded by the continued administration of small doses, they are unwilling to countenance this innovation on established practices. These prejudices are of course to be regarded and duly respected. A sufficient number of observations have not yet been made, perhaps, to justify the universal adoption of the practice, although sufficient to justify a continuance of the observations. Time only can prove the value of the practice universally.

And why should not large doses of quinine be preferable to smaller, after all that has been said? Let us now present some reasons drawn from analogy, and from the true *modus operandi* of this medicine. We have stated that all articles of the *materia medica* have their medicinal dose. We may go farther, and assert that the effect of medicines depends often upon the *dose* and the *mode of administration*. Take almost any article of the materia medica and examine its properties; we find that *upon the dose* will depend the effect. Nearly all emetics are tonics in small doses; they act as diaphoretics in other doses, and then we find them producing their specific emetic effects in full doses. Now take *opium*; would you give minute doses to produce sleep in *mania a potu*? Take *calomel*; would you give it in minute doses to produce catharsis? Need we go farther to illustrate, from the materia medica, that upon the *dose* of a medicine depends its effect? Then why need we exclude from quinine this property of producing different effects, in proportion to its doses? We *should not*, as illustrated by the observations already made. Let us recommend to the profession to cast aside old and wedded prejudices, and to open their minds to conviction. If they are not satisfied with the statements that have been made, and are unwilling to venture upon the administration of large doses of quinine, they may at all events feel assured that no injury can result from a cautious imitation of the practice. The field is still open for observation and experiment, and the subject is of sufficient importance to demand all the energies of the laborers

in science and the friends of humanity. For, after all, it is from the accumulated evidence and experience of the profession, that we are to be governed in this as well as in all points of practice?

It will therefore be seen that we entertain different views as to the administration of large doses of quinine, from our friend Dr. Buck. We agree perfectly in his motto, "*in medio tutissimus*," &c. We agree with him, also, that medicines are to be used and not abused—"*Utor et non abutor*." The questions between us, then, are, first, *what is the medium dose*, and what would be the abuse of this medicine? Judging from our own experience, as much good can be derived from 10 to 20 grains as from larger quantities. We would consider 15 grains as a medium dose, though we are not by any means disposed to question the assertions of those who have made more extended observations, as already shown, and who give 30 or 60. We again disagree with the author of this paper, in his opinion that it is improper that such a communication as that of Dr. Van Buren should be placed before the public. On the contrary, we think it should be published. Though an epitome of facts, they were collected after much labor and close observation, by responsible men in the profession, and under the high sanction of the Medical Bureau of the Army. It should be published, because it calls the attention of the profession to a most important subject, one upon which various ideas are entertained by the medical men of this and other countries; thus affording these an opportunity of testing the correctness of the observations.

The latter part of Dr. Buck's paper, is a continuation of the subject, of the use and abuse, &c. This portion of the paper has particular reference to the *lead practice*, in the diseases of the alimentary canal. From the extensive abuse of this medicine by a late medical officer of the army, Dr. B. has deduced arguments, very fallacious in our opinion, against large doses of quinine. He does not deny the value of lead in its medicinal dose. In speaking of the poisonous effects of lead, we regret he does not enter more fully into his own experience of the use of the article in disease. We are of that class of practitioners, who use lead extensively in bowel affections, hemorrhages, &c., and without having yet discovered the slightest ill consequence from it. We have been even disposed to doubt the statements made by writers, that the acetate of lead does ever produce colica pictonum. We should have been pleased had the author of this paper been more specific and extended in his observations on this point.

Taken as a whole, Dr. B.'s paper has much merit, and this Department should applaud his motives, whether they approve of his views or not. We are much indebted to him for calling the attention of the Department immediately to this momentous subject. In this he has exhibited his usual zeal in promoting the objects and in furthering the views of the Department.

In conclusion, your committee entertain the hope that the design of both Dr. Van Buren and Dr. Buck will be attained. We hope that their papers will elicit from this Department a full expression of views

and sentiments, together with the accurate detail of your experience of the subject under consideration. All of which is respectfully submitted by your COMMITTEE.

NOTE.—A good reason for giving large doses of quinine rather than small in intermittent fever, is that a smaller amount of the article is necessary to effect a cure. This I assert on the authority of those who have tested this by many cases. Thus in 75 per cent. a single dose of 20 grains of quinine will effect a cure, while giving it in small doses it will require nearly double the amount. It is a matter also of some importance, inasmuch as this is an unpleasant medicine to take, to diminish the number of doses as much as possible.

THE MEDICAL SCHOOLS IN VIENNA.—LETTER FROM DR. DIX.

To the Editor of the Boston Medical and Surgical Journal.

DEAR SIR,—Having taken lodgings here in the medical faubourg, close to the Allgemeine Krankenhause, and already passed some time here, I send you a brief sketch of this mammoth hospital, or rather village for the sick. It was founded during the latter part of the last century, by the Emperor Joseph II., with the design of concentrating the various hospitals which then existed remote from each other. The funds of most of these hospitals were devoted to the new one, and the building erected at the Emperor's private expense. To this, large additions were made about ten years ago, and it is now perhaps the largest in the world, covering some sixty or eighty thousand square feet with its buildings and courts. It embraces eleven large courts, or gardens, and can accommodate 1247 male and 967 female patients. It is divided into six medical and four surgical wards, embraces four cliniques, and numbers in its faculty men of great ability, among whom Dr. Rokitansky, the director of the department of pathological anatomy, Dr. Skoda in pulmonary, and Dr. Rosas in ophthalmic diseases, are perhaps the most prominent. The cabinet of pathological anatomy contains about 6000 preparations, and is chiefly the result of the labors of Dr. Rokitansky, who has now in process of publication a very elaborate work, of which it is the basis. Indeed, the large mortality in this city—1 in 27—is especially favorable to this pursuit. About 1500 autopsies are performed annually in this hospital.

Near to this is another, about one fourth the size, a military hospital, and immediately adjoining both is the Medical University, in which are commodious lecture rooms and a museum of anatomical preparations in wax, here said to be the most valuable in the world. It is part of the spoil taken by Napoleon to Paris, and was returned to Vienna after the battle of Waterloo. The obstetrical division of this cabinet is the largest and most complete. There is also at the clinique of Dr. Rosas a valuable collection of wax and other preparations, some of which, together with a few other drawings, are interesting as the work of its founder, Beer. Together with this, is shown a cabinet containing a large, and, as

it is said, though incorrectly, complete assortment of all the instruments which have ever been used or invented for ophthalmic surgery, in modern times. Though not as perfect as it professes to be, this collection of instruments, it must be confessed for the most part useless, is interesting in an historical point of view, as they are arranged chronologically. This clinique contains 80 beds, and admits also many out-patients. Another, at the Military Hospital, has not so many beds, but about the same number of out-patients, and is conducted with great spirit by Dr. Jaeger and his son. The prominent disease here, as at similar institutions elsewhere, is catarrhal or purulent ophthalmia; at the clinique of Dr. Rosas always denominated catarrhal, and at that of Dr. Jaeger always Egyptian, ophthalmia.

The Lying-in Hospital is of great extent, and, although it gives very unfavorable evidence as to the morals of the community, affords uncommon facilities to the student. The opportunities for dissection are, literally speaking, unbounded, and they are also, except to strangers who may require some peculiar conveniences or arrangements, quite gratuitous.

But the acquirement of an entire medical education, here as elsewhere in Europe, is by American medical students, seeking to become doctors by the shortest and easiest method, not to be thought of. For the degree of physician, four years of study are required—and for that of surgeon, two in addition; six years for what with us is obtained in three at the utmost. There are no petty medical colleges here, maintaining a sickly existence by lowering the standard of medical requirements, and more anxious to exhibit a large annual catalogue than to send forth competent graduates. Examinations are by no means a profound affair, but for practitioners in the army they are exceedingly strict. The professors are in fact, as they receive their places and salaries from government, altogether independent of the student, or at least under no pecuniary obligation to him; and to this circumstance, as also to an involuntary sympathy with the political complexion of the government from which their authority is derived, is perhaps to be attributed a peculiarity of manner towards the students at a clinique, or rather the examination which follows, bordering a little on the insolent; and this, too, from men who are to other persons, and at other times to their students, perfectly courteous. This is especially observable at the cliniques of the Military Hospital, and yet these are the ones which of all that I have seen in Europe (I speak only of England and Germany) are most to be recommended. There is at present, however, not one American student here, although there are many English. In fact, although the lectures, dissections, &c., are gratuitous, the fees required to be paid to the University on taking a degree, amount to somewhat more than all the expenses attending the three years' course at most respectable institutions in America.

Yours, &c.

JOHN H. DIX.

Vienna, Jan. 14, 1845.

SLEEP, ITS IMPORTANCE IN PREVENTING INSANITY.

"While I am asleep, I have neither fear, nor hope, neither trouble, nor glory: and blessings on him who invented sleep, the mantle that covers all human thoughts; the food, that appeases hunger; the drink, that quenches thirst; the fire, that warms cold; the cold, that moderates heat; and, lastly, the general coin, that purchases all things: the balance and weight, that makes the shepherd equal to the king, and the simple to the wise."—SANCHO PANZA.

We have heretofore stated that in our opinion, the most frequent and immediate cause of insanity, and one the most important to guard against, is the *want of sleep*.

So rarely do we see a recent case of insanity, that is not preceded by want of sleep, that we regard it as almost the sure precursor of mental derangement.

Notwithstanding strong hereditary predisposition, ill health, loss of kindred or property, insanity rarely results unless the exciting causes are such as to occasion loss of sleep. A mother loses her only child, the merchant his fortune, the politician, the scholar, the enthusiast, may have their minds powerfully excited and disturbed; yet if they sleep well, they will not become insane.

We find no advice so useful to those who are predisposed to insanity, or to those who have recovered from an attack, as to carefully avoid everything likely to cause loss of sleep, to pass their evenings tranquilly at home, and to retire early to rest.

Long-continued wakefulness disorders the whole system. The appetite becomes impaired, the secretions diminished or changed, the mind dejected, and soon waking dreams occur, and strange phantoms appear, which at first may be transient, but ultimately take possession of the mind, and madness or death ensues.

We wish we could impress upon all, the vast importance of securing sound and abundant sleep; if so, we should feel that we had done an immense good to our fellow-beings, not merely in preventing insanity, but other diseases also.

We are confident that the origin of much of the nervousness and impaired health of individuals who are not decidedly sick, is owing to a want of sufficient and quiet rest. To procure this, should be the study of every one. We fear that the great praise of early rising, has had *this* bad effect—to make some believe that sleep was of but little consequence. Though it may be well to arise with the sun, or when it is light—not before, however—yet this is of minor consequence in comparison with retiring early to bed.

Laboring people should retire as early as *nine* in the evening, and all others by *ten* or *eleven*. Those who are liable to have disturbed sleep, should take especial care that their evenings pass tranquilly. Many are injured by attending theatres, parties, balls, or other meetings in the evening, by which they are so much agitated that their sleep is broken and unquiet.

The practice of spending the evening in some of the objectionable methods just mentioned, is now far more common among all classes than

formerly, and is, we apprehend, one cause of the increase of nervous diseases.

The old poets were well aware of the value of sleep. Not only Shakspeare, and Dryden, and Young, have sung its praises, but Drummond thus extols it.

> "Sleep, silence, child, sweet father of soft rest,
> Prince, whose approach peace to all mortals brings,
> Indifferent host to shepherds and to kings,
> Sole comforter of minds which are oppressed;
> Loe, by thy charming rod, all breathing things
> Lie slumb'ring, with forgetfulness possest."

Many allude to the fact, that while it is the solace of the needy and poor, it often flies "the perfumed chambers of the great."

> "Sleep is a god too proud to wait in palaces,
> And yet so humble too, as not to scorn
> The meanest country cottages;
> 'His poppy grows among the corn,'
> The halcyon sleep will never build his nest
> In any stormy breast.
> 'Tis not enough that he does find
> Clouds and darkness in the mind;
> Darkness but half his work will do;
> 'Tis not enough; he must find quiet too."—COWLEY IMIT. HORACE.

Sir Philip Sidney calls it the "Poor man's wealth."

> "Come sleep, O sleep, the certain knot of peace,
> The baiting place of wit, the balm of woe;
> The poor man's wealth, the prisoner's release,
> Th' indifferent judge between the high and low."

To procure this rich gift, it is important, in the first place, that the mind should not be disturbed for several hours before retiring to rest.

2d. Retire early, and neither when very warm or cold; sleep on a hair mattress, or on a bed not very soft. The bed-room should be large and well ventilated, and the bed should not be placed near the wall, or near a window, as such an arrangement often exposes the person to currents of cold air.

3d. There should be nothing tight about the neck, and the Chinese rule of brushing the teeth before retiring is a good one. Tea or coffee taken late in the evening is apt to disturb sleep. Strive to banish thought as much as possible, or take up the most dull subject. Study, during the evening, is improper.

Some few persons, we know, are able to perform much mental labor, and to study late at night, and yet sleep well. Some require but little sleep. But such individuals are very rare. Gen. Pichegru informed Sir Gilbert Blane, that during a whole year's campaign, he did not sleep more than one hour in twenty-four. Sleep seemed to be at the command of Napoleon, as he could sleep and wake apparently at his will.

The present Minister of France, M. Guizot, is a good sleeper. A late writer observes, "his facility for going to sleep, after extreme excitement, and mental exertion, is prodigious, and it is fortunate for him he is so constituted, otherwise his health would materially suffer. A minister in France ought not to be a nervous man; it is fatal to him if he is. After the most boisterous and tumultuous sittings at the Chamber, after being

baited by the opposition, in the most savage manner—there is no milder expression for their excessive violence—he arrives at home, throws himself upon a couch, and sinks immediately into a profound sleep, from which he is undisturbed till midnight, when proofs of the Moniteur are brought to him for inspection."

In conclusion, we hope these few remarks, and the *good old poetry* we have quoted, will have some influence, and induce many, especially our fair readers, not to disregard sleep, but on the contrary to cultivate it; to regard it not as an evil that comes to interrupt enjoyment, but as a *great accomplishment*, and a pleasure of itself—as Keats says,

"What is more gentle than a wind in summer?
What is more soothing than the pretty hummer
That stays one moment in an open flower,
And buzzes cheerily from bower to bower?
What is more tranquil than a musk-rose blowing
In a green island, far from all men's knowing?
More healthful than the leafiness of dales?
More secret than a nest of nightingales?
More serene than Cordelia's countenance?
More full of visions than a high romance?
What, but thee, Sleep? Soft closer of our eyes!
Low murmur of tender lullabies!
Light hoverer around our happy pillows!
Wreather of poppy buds, and weeping willows!
Silent entangler of a beauty's tresses!
Most happy list'ner! when the morning blesses
Thee, for enlivening all the cheerful eyes
That glance so brightly at the new sunrise."

American Journal of Insanity.

NEW PREPARATION OF CINCHONA BARK.

Mr. Donovan, of Dublin, has collected a considerable amount of evidence from numerous medical authors, tending to prove that the alkaloids of the barks, quinine and cinchona, &c., are not the only constituents which give those barks their medicinal properties, but that their anti-periodic efficacy depends, in part, upon other ingredients, and much upon the combination in which the alkaloids are found in the natural state of the bark. The sulphate of quinine is, at present, the form most commonly employed, but many authorities are adduced by Mr. Donovan, to show that it cannot always be depended on.

Under the impression that these preliminary points are proved, Mr. Donovan proceeds to relate his experiments, made with the view to obtain an agreeable preparation, containing all the virtues of the bark in a small bulk. "Hitherto," he says, "there has been no way of exhibiting bark in its full powers, except in the state of powder, which, to most persons, is so disgusting a dose that it is rarely prescribed." The following is the preparation which he conceives accomplishes the purpose:

Let eight ounces of yellow bark, in coarse powder, be digested with a pint of proof-spirit for a week, in a close vessel, with frequent agitation. The tincture is to be fully extracted by the screw-press; the residuum is to be digested with another pint of proof-spirit for a week, and the tinc-

ture again expressed. The residuum is now to be boiled for half an hour with a pint of water, and the decoction strongly pressed out. The boiling of the residuum a second and a third time with a new pint of water is to be performed in the same manner; and then the three decoctions, mixed, are to be evaporated by heat to eight ounces. It will be much the better if this be done in a vacuum. The tinctures mixed, are to be distilled or evaporated until eight ounces remain; and these, still boiling hot, are to be added to the evaporated decoction. A pint of liquid will thus be produced, the chief ingredient of which is dikinate of quinina.

To this liquid add 315.31 grains of dinoxalate of quinina, and boil for a few moments; then add 21 troy ounces of refined sugar, and 4 ounces of best gum Arabic, both in powder and previously mixed. The whole is to be kept stirring until the solution is effected; and if the resulting syrup, when cold, does not amount to 32 ounces by measure, water is to be added to make up that amount. When cold, filter through flannel.

In each ounce of this syrup there will be 16 grains of anhydrous dikinate of quinina. This syrup is twenty-five times stronger than the decoction of bark.

It remains to offer a few suggestions relative to the pharmaceutical employment of this syrup. In general it may be used in any mixture of compatible liquids, when the powers of bark are required, and when the other liquids are already sufficiently voluminous, and would be altogether too bulky if decoction of bark were employed. Thus in the simultaneous exhibition of decoctions of bark and sarsaparilla, in equal quantities, the smallest efficient dose of the mixture is six ounces three times a day. By altering the formula to 15½ ounces of decoction of sarsaparilla, and 5½ drachms of syrup of bark, the same powers are exhibited in half the foregoing bulk.

The following contains all its energy in a state of perfect development and activity, and is a pleasant carminative tonic:—Cinnamon water, six ounces and a half; syrup of bark, half an ounce; compound tincture of bark, an ounce. An ounce measure of this mixture is equivalent to thirty-six grains of bark in substance.

When bark and iron are indicated, the following is the formula in which the least chemical action takes place between the tannin and the iron, as no discoloration appears for several days:—Precipitated carbonate of iron, syrup of bark, of each an ounce. Mix. Dose, the size of a small nutmeg.

The strength of this syrup is such, that one drachm is a full dose, either by itself or in water. Aromatics, such as anise or fennel, are said perfectly to mask the bitterness of preparations of quinina. M. Pierquin says, that thirty-two grains of carbonate of magnesia conceal the taste of six grains of sulphate of quinina, without interfering in its virtues.

To conclude: this preparation of bark seems deserving of the attentive consideration of physicians, as it contains all that is valuable in that medicine, in a state of perfect preservation and full energy. It presents the active ingredients exactly in their natural state, which good judges have declared to be in many forms of disease absolutely necessary.

It contains nothing but what is an unaltered proximate principle of bark. The form is commodious, not liable to spoiling, is less disagreeable than any other, and may be rendered even agreeable.—*Pharmaceutical Journal.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, MAY 14, 1845.

Hydriodate of Potash.—A distinguished member of the profession assures us that he has taken the hydriodate of potash for more than two years for asthma, and he confesses that he feels a *personal* concern in the manufacture of the article. Two years since he purchased it for about $6 the lb.; now the same article costs $20. There has, no doubt, been a universal, though noiseless, adoption of it by the faculty, and this may be the only reason why the drug should become so scarce. He was told, however, by an apothecary, in New York, that iodine was used much now as a paint. Thousands of tons of sea weed lie waste on the beaches near Boston, and in fact on our whole sea coast, which the inhabitants of the coast, if they understood the value of the ashes of those plants, would collect, and thus give the country a supply of iodine. We beg to suggest to physicians who are favorably located for the purpose, that a profitable income might be derived by them, or some of their friends, from this source. Here in the United States it is as yet an untried source of domestic economy, but we have no doubt it would yield a very considerable sum in the course of a season, without any expense worth naming for the raw material. It is really a matter of surprise, considering the characteristic ingenuity of our countrymen, that sea weed, which accumulates on the shores in prodigious quantities, has been suffered to be used, when used at all, for no higher purpose than an imperfect manure. The subject is worthy of special consideration.

Veterinary Medicine.—Mr. Colman, the learned American writer on Agriculture, now in England, in the third Part of his admirable numbers on European Agriculture, speaks of the great importance of studying and practising veterinary medicine and surgery. "Humanity calls upon us," says Mr. Colman, "to alleviate suffering, wherever suffering exists. I wish that veterinary instruction was connected with all our medical schools, and made an indispensable branch of study. We try all kinds of experiments upon these helpless animals, for the benefit of science, and science should do something to repay the debt, by attempting, in every practicable form, to alleviate the sufferings of the race. In the country, a medical practitioner, who would add veterinary skill and practice to his other services, would confer immense benefits. It is lamentable that, by a false standard of moral duty, such an attempt should be thought degrading. In many cases it might subject him to painful and thankless services; but the life of every benevolent physician is full of such services, and he has only to thank God that he has the power of doing so much good, often at so little

cost. So far from such a practice being degrading, the physician who would be willing to render such services, would be worthy of double honor; for the more humble, the meaner, the more friendless the sufferer, proportionably is the glory of the kindness enhanced. There is no reason, however, why such services should be gratuitous, and in many situations it would form a profitable branch of practice."

Modern Medical Practice.—The same gifted writer, Mr. Colman, whose comments on the sciences are sometimes quite equal to the wise sayings of those who are especially devoted to them, writes as follows respecting improvements in medical practice. "The public may congratulate themselves that medical practice is now every where assuming the character of prevention rather than cure; and that the truly respectable part of the profession, dropping that profound air of mystery with which they formerly were accustomed to wrap themselves up, and which made one tremble in their presence almost as much as in the presence of the original professor of the black art, now prefer the more simple to the more artificial practice. They seem to be fast learning that nature, like others of the sex, may be persuaded, but not forced; may be kindly led, but woe be to the man who attempts to drive her; and that, in truth, the great object of medicine, is not to give health, but to remove disease; to clean and adjust the machinery, and then it will go itself, barring accidents, as long as it is intended to go at all."

British American Journal of Medical and Physical Sciences.—A specimen No. of a new journal bearing the above title, to appear monthly, is now circulating. It is to be published at Montreal, under the editorial care of Archibald Hall, M.D. If the succeeding Nos. are as rich in original materials as this, we shall be extremely gratified to have the work well sustained; and if it arrives in Boston punctually, which has not been the case with the present Montreal Medical Gazette, there will be additional pleasure in its perusal. Dr. Hall is situated favorably for procuring the proper food of a journal—being one of the physicians of the General Hospital. He also exhibits a ready tact in expressing himself on such subjects as legitimately belong to the province of medicine. If his enterprise fails of success, the cause will be imputable to the profession in the Provinces, and not to himself. Having the pleasure of a personal acquaintance with many of the leading professional gentlemen in the Canadian cities, we are certain that no place is blessed with higher minded or better qualified medical practitioners. By their patronage and their united exertions, they could give both permanence and brilliancy to any medical periodical.

New Medical Bill in Canada.—Towards the close of the late session of the United Canada Legislature, Attorney General Smith postponed to the next session, the "*Bill for regulating the Study and Practice of Medicine in the Province.*" Some of the mother country leaven is at work in the Provincial Parliament; but the proper question is simply this—will the people, or the practitioners themselves, enjoy more privileges or better protection under any modification of the law, than they now do? Experience, here in

New England, and, in fact, almost everywhere else, proves that legislation cannot suppress quackery, or induce people to take advice from sources not precisely agreeable to themselves. In short, men, women and children, have no sort of respect for laws that interfere with them in patronizing just whom they please. A discovery of this fact has led to the repeal of whole bundles of statute regulations, and, finally, in Massachusetts, secured to any one the privilege of turning doctor with as little ceremony as some adventurers use in changing their politics. This freedom has done wonders towards placing the educated members of the profession in the very position they have a right to occupy, in the estimation of the thinking, responsible part of the community. Religion is nowhere better cherished and sustained, than where the State leaves it free for every man to hear and pay religious teachers, or stay away and not pay. So it is with respect to the medical profession: practitioners are well sustained and honored, where the law is wholly silent in regard to any special protection.

Cleft Palate.—An essay on this subject, embracing the treatment, by Dr. S. P. Hullihen, of Wheeling, Virginia, has been received. Last season, a paragraph was given in regard to the author's method. The present pamphlet has several wood engravings, which make the text much better understood. Dr. Hullihen's needle holder is rather complicated in structure, but may prove a good instrument, notwithstanding. Dr. Smilie's needle, recently invented, and described in the Journal within a few weeks, seems to be altogether superior to this, and if Dr. Hullihen could use it in one operation, it strikes us that he would soon after abandon the instrument he describes. Every person who exerts himself to better the condition of the unfortunate, either physically or morally, commands our respect, and we therefore thank the author referred to in these remarks, for his ingenious contributions to the common stock of surgical knowledge.

Anonymous Advice to the Editor.—Nothing more completely indicates a base coward, than anonymous letters of attack or censure. We have been annoyed, more than once, by an envious, mischief-making writer, who evidently resides in Cortland village, N. Y. In consequence of an article appearing in this Journal from a certain source, his ill will is again roused, and we are warned anonymously of the consequences of publishing any more from the pen of his old grudge. The chirography is badly distorted, yet is evidently the work of a good penman. Here follows the penalty of further incurring the displeasure of this assassin. "Finally, my object in writing to you now, is to inform you that the physicians of this county resolved, at their last meeting, that if you continue to publish S——'s trash, that we withdraw from the support of your Journal entirely. Such is the decision of our society, and we shall live up to it." The manuscript is at the service of the President or Secretary of the Cortland Co. Medical Society.

Fœtal Circulation.—The very beautiful and correct colored drawings illustrative of the fœtal circulation, on which Mr. Child has been a long while engaged, are now finished. We hope the artist will meet with such

substantial encouragement as to induce him to commence a series of colored lithographs explanatory of the appearance of the eye in its diseased condition, which is contemplated.

New Specific Remedy.—A majority of all the medical men in the civilized world, are doubtful of the existence of specific remedies for particular diseases. In the face of this well-known fact, however, Dr. Pierce's *Spikenard and Dandelion Syrup* is advertised as "a specific for scrofula, salt rheum, erysipelas, rheumatism, ring worm, scald head, ulcers, inflammation of the liver, cutaneous eruptions, pimples, piles, blotches, ulcers on the bowels, cancers, nervous tumors, &c." Who can this Dr. Pierce be? Or is the name manufactured as a passport for the medicine to public favor? Surely, he is a fortunate man, to be master over such a haste of common foes to health. From the circumstance that a book of certificates of marvellous cures is freely circulating in Boston, it is presumed that Dr. Pierce thinks, as other quacks do, that there is good picking in the literary emporium.

Case of Epilepsy.—Dr. S. Gower relates the following case in a late No. of the Lancet:—"The patient was a girl of about 7 years old. The muscles of one side of the face and of the body were dreadfully convulsed, and the eyes everted nearly into the corners of the sockets, not squinting, but both turned the same way, from right to left. I bled her from a branch of the temporal artery, to the amount of four teacupfuls, taking the blood from the temple, on the opposite side to that affected. After bleeding, the muscles on the side affected ceased to be convulsed, and the muscles of the opposite side became so, but in a less degree; the eyes also vibrated, but with less violence, towards the opposite corners. After an hour or two, during which a warm bath was employed, and chloride of mercury, with tartrate of antimony, administered, leeches were applied to the other side of the temples, and she finally, and, indeed, speedily recovered. As headache had been complained of for months previously, and as free bleeding so speedily relieved the convulsions, I am inclined to think that, if unrelieved, the case would have terminated in apoplexy. If so, she owes her life in part to her having sensible people for her parents, who placed no obstruction in the path of my duty to her and them. About three months have elapsed without any recurrence of the disease. What I record this case for is not on account of its favorable termination, but because it is an instance of a transfer of convulsive action from the side first affected to the other, which was evidently caused by unloading the bloodvessels of the opposite hemisphere. The rescue from pressure of cerebral or nervous filaments, which were sufferers under the incubus of plethoric bloodvessels, would seem to have been effected."

Strangulation by Machinery.—On Monday, January 16, 1845, Mr. Baker held an inquest on the body of William Laurence, aged 18, employed by Mr. Martin, paper glazer and embosser. On the previous Friday evening, deceased was about to glaze some paper at a one-horse-power steam engine, and was passing a proof sheet between its rollers, one of which is of hollowed brass, heated by a red-hot round bar of iron, in the manner of a tea urn. He wore at the time a neckerchief, tied sailor-like, with the

ends depending loosely and long. The sheet of paper he was trying, missing its bite, slipped, and as he stooped to catch it, the ends of his neckcloth got beneath the brass roller, and he was drawn in with his neck and side face tightly fixed against it. He cried out "stop the engine," and two fellow workmen hearing the appeal he made, hurried to his assistance, and did so. They then unscrewed the rollers, and extricated the deceased. He sighed heavily, once or twice, and expired. Mr. Matcher, a neighboring surgeon, pronounced the cause of death to be strangulation, and accounted for its suddenness through the close contact of the deceased's visage with the heated roller. Had it been cool, since he was so expeditiously extricated, he might not have been strangled. Verdict, "Accidental death."—*London Illustrated News.*

Medical Miscellany.—Two men recently lost their lives at Mineral Point, Wisconsin, by eating wild parsnip.—Dr. James H. Tate has been appointed Consul at Buenos Ayres.—Surgeon W. A. W. Spotswood is ordered to the Vandalia. Surgeon N. Pinckney is to discharge the duty of Surgeon of Rendezvous, together with his own as Surgeon of the Naval Station and Receiving Ship at Baltimore. Surgeon N. C. Barrabino is detached from the Rendezvous at Baltimore, ordered to the Vandalia on temporary duty. Surgeon D. S. Green is detached from the Vandalia. Surgeon S. Sharp has leave of absence renewed for three months. Surgeon Geo. Clymer has leave of absence from the Washington Navy Yard one month. Dr. Washington Sherman is appointed Assistant Surgeon in the Navy.—The yellow fever has appeared at Guayaquil, and also the horrible disease called the *button of gold*—of which nearly all die who are attacked with it, within about twenty-four hours.—Vast quantities of the tusks and teeth of the mastodon have recently been found in Russia.—Dr. Oris A. Brown, Chief Clerk of the Navy Department, has resigned.—Rumor says that Dr. Geo. F. Lehman has received the appointment of Postmaster of Philadelphia.—Smallpox has made its appearance at Newburyport, Mass. It has also been brought to Philadelphia from Liverpool, in the packet ship Monongahela.

To Correspondents.—Some remarks by Dr. W. H. Van Buren on Dr. Buck's strictures on his paper relating to the use of large doses of quinine, were received too late for this No. One of the reports by a Committee of the National Institute, appointed to examine Dr. Buck's communication, will be found in to-day's Journal. In the mean time, as will be seen under our obituary head, Dr. Buck has been suddenly prevented, by death, from all further participation in this and every other earthly pursuit.

Married.—In Portland, Conn., Gershom C. H. Gilbert, M.D., to Miss Harriet Tallcatt, daughter of Rev. H. Tallcatt, of Portland.—At New York, H. Van Arsdale, M.D., to Miss Anne C. Hillman.

Died.—At the United States' Arsenal, Washington, D. C., Dr. Marcus C. Buck, of apoplexy.—At Tecumseh, Michigan, of epidemic erysipelas, John W. Curtis, M.D., 28.

Number of deaths in Boston, for the week ending May, 10, 37—Males, 23; Females, 14. Stillborn, 4.
Of consumption, 4—palsy, 1—hooping cough, 1—dropsy, 1—gravel, 1—smallpox, 1—typhus fever, 1—scarlet fever, 5—canker, 2—paralysis, 2—jaundice, 1—dropsy on the brain, 3—convulsions, 1—lung fever, 2—accidental, 2—child-bed, 1—teething, 2—inflammation of the bowels, 1—marasmus, 1—diarrhœa, 1—erysipelas, 1—drowned, 1—unknown, 1.
Under 5 years, 16—between 5 and 20 years, 5—between 20 and 60 years, 11—over 60 years, 5.

Rupture of the Liver. By E. W. C. KINGDOM, Esq., Edin.—During last autumn, the month of September, I think, a boy, driving a coal wagon on the Edinburgh and Dalkeith Railway, lost his balance, and fell before it, the wheels passing over his body. Some colliers observing the accident, conveyed him to his mother's house, which was not far distant, and where, along with a medical practitioner, I shortly afterwards saw him. He was lying in a state of insensibility, with paralysis of the lower extremities, consequent on fracture of the last dorsal and first lumbar vertebra, and laceration of the spinal cord. Urine and fæces had been passed involuntarily. The abdomen was tumid, but "*not the least mark*" of external injury. The boy lingered for about five hours when he expired. A "sectio" was allowed, when the above fracture was discovered, and on the abdomen being opened, blood welled out in considerable quantity; and indeed it required a pretty active use of the sponge before the proper state of matters could be ascertained. We then discovered that the liver was ruptured transversely throughout its whole extent, and the hæmorrhage had evidently proceeded from the portal vessels. It was *completely* divided, and as clearly as if it had been done with a knife.

Remarks.—The first question that naturally arises here is, how could this complete division occur? The only injury to be perceived from external examination was the fracture of the vertebræ, the boy having fallen on his face and the wheels of the wagon passed over the spinal column. This, one would be led to suppose, could not affect the liver to such a degree, without we are to take it for granted that the abdomen was compressed in the hepatic region by the raised iron rail, and then, surely, we must have some external mark, as an indentation of something of that sort; yet there was not the least mark of violence, although such destruction of the liver was sustained. I have heard of another case only, which occurred in a child in this city, which was occasioned by leaping from a wall a few feet in height; the child died immediately, and a *post-mortem* examination revealed a similar rupture of the liver to the one just recorded.—*London Lancet.*

Suppression of Hemorrhage from the Nose.—The new remedy for arresting epistaxis, suggested a year or two since, by holding up one or both hands, was thus alluded to by Dr. Webb at a late meeting of the Medical and Physical Society of Calcutta.

In the first case he had tried it, the man, an European soldier, was absolutely exhausted by the continued hemorrhage; several pans were filled with bloody rags. The man had nasal polypus, and plugging the posterior nares was impossible. He was too weak to hold up his hands, but the instant they were held up by others, the hemorrhage ceased. On being met with two days after, he said, "Oh, sir, I have no fear of it now, *I can always hold on by the bed-post.*"

Another case had kept a medical officer in harassing attendance, and Mr. Webb had been asked to relieve him. He found the patient very blanched and pale; and a serious expression on the face of his friends. Mr. Webb brought up a large screen, put one hand of the patient upon the top, and kept it there. The bleeding stopped as by magic.—*India Medical and Surgical Journal.*